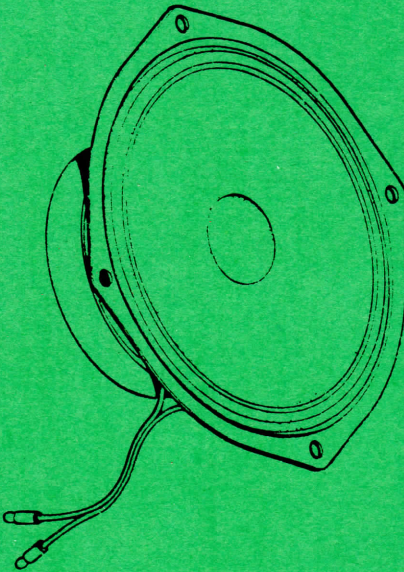


2

Radio Interference Suppression



RADIO INTERFERENCE SUPPRESSION

Before fitting suppression components, ensure good earth connections between the metal parts of the vehicle.

The radio and aerial must be correctly earthed.

Components required.

1. microfarad capacitors.

3. microfarad capacitors.

Right angled plug caps

Right angled plug caps with moulded shroud (These are for use on wire cored "HT" leads)

Straight screened plug caps

Right angled screened plug caps (These are for use on resistive "HT" leads)

Push in adaptor for distributor end caps

3A in-line chokes

7A in-line chokes

NOTE: Chokes are primarily for VHF installations, but may be used for long and medium wave band equipment when capacitors alone do not prevent interference.

Radio-interference suppression

When tracing radio interference the following sequence should be adhered to.

SWITCH IGNITION "OFF"

To eliminate external interference, disconnect the aerial.

Use of a Dummy Aerial.

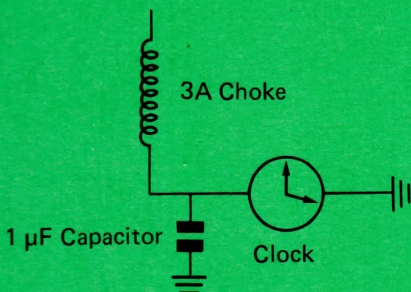
When the aerial is removed a loss of sensitivity is experienced due to the aerial input circuit being no longer loaded, this will result in a decrease of interference. To enable the set to remain at full sensitivity whilst tracing interference, a dummy aerial plug, fitted with a 60 pF condenser is inserted, eliminating aerial borne interference and signals.

SWITCH THE RADIO "ON"

If a regular ticking sound is heard it can be assumed to be the clock.

Fit a 1 microfarad capacitor between the clock feed terminal and earth.

If it is necessary, fit a 3A choke in the clock feed.

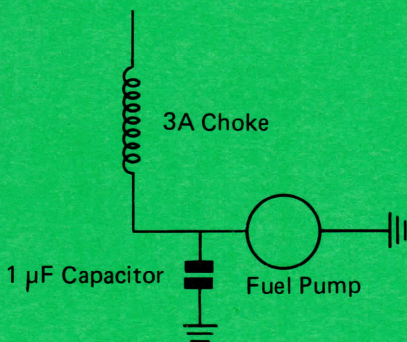


SWITCH IGNITION "ON"

If an intermittent ticking sound is heard through the speakers: fit a 1 microfarad capacitor between the Fuel Pump feed terminal and earth. If the ticking sound still affects the radio, fit a 7A choke into the fuel feed cable.

If a slow crackling sound is heard it will be the Voltage stabilizer: fit a 1 microfarad capacitor between the voltage stabiliser and earth.

If the crackling sounds persist, fit a 3A choke in the voltage stabilizer "B" lead and also in the "1" lead.

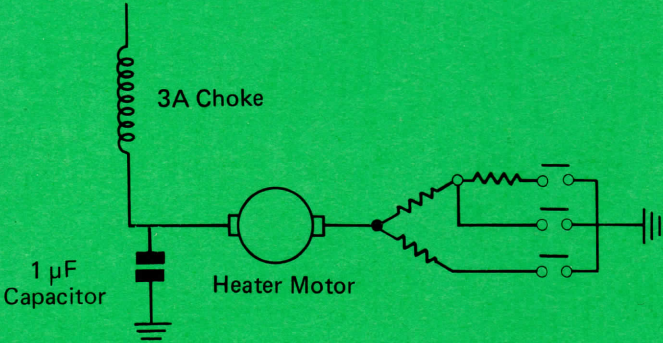


SWITCH HEATER MOTOR "ON"

If the heater interferes with the radio a persistent whining sound will be heard.

Fit a 1 microfarad capacitor between the feed terminal and earth.

If interference is still heard, fit a 3A choke in the supply lead if the motor has a wire wound magnetic field or a 7A choke in the supply lead if the motor has a permanent magnetic field.



SWITCH WIPER MOTOR "ON"

NOTE: It is advisable to operate the screen washer during this test, to alleviate overloading the wiper motor.

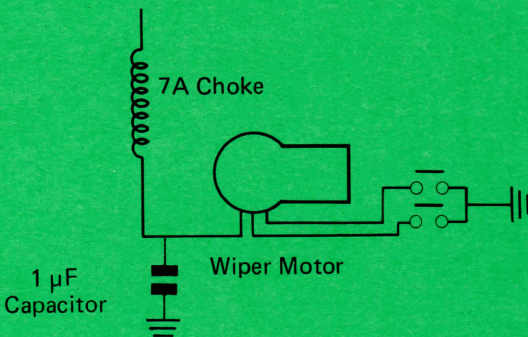
If there is a persistent whine in unison with the wiper motor movement

Fit a 1 microfarad capacitor between the feed terminal and earth.

If interference is still heard: fit a 3A choke in the supply leads if the motor has a wire wound magnetic field, and a 7A choke if the motor has a permanent magnet.

A braided earth strap can also be fitted between the wiper motor body and the chassis as an aid to interference suppression.

Operate all the circuits which may cause interference individually. If noise is heard through the speakers it can be eliminated by fitting a 1 microfarad capacitor between the live feed of the accessories and earth.

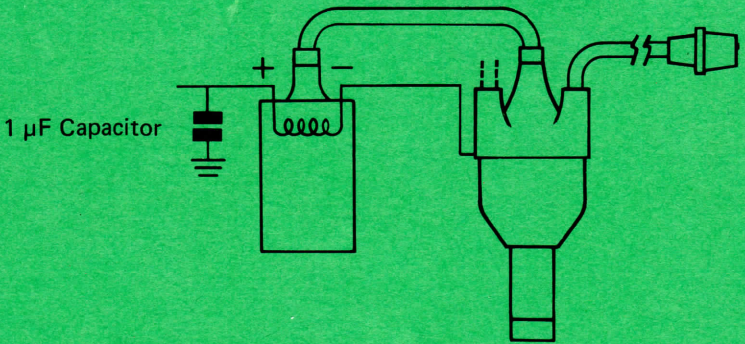


START ENGINE

When engine is warm and will "tick-over" the ignition system will need suppressing if a loud crackling noise, proportional to engine speed, is heard.

Fit a 1 microfarad capacitor between "SW" side of coil and earth, NOT to the "CB" (distributor) side. On wire cored "HT" leads, fit suppressed plug caps and distributor end caps.

On resistive "HT" leads, fit screened plug caps.



HIGH ENGINE SPEED

With a "DC" (Dynamo) charging system if a whining sound, proportional to the engine speed is heard through the speakers, fit a 1 microfarad capacitor between "D" terminal and earth.

If there is a low frequency crackling sound that is constant throughout different engine revolutions, it can be attributed to the control box. Fit a 1 microfarad capacitor between the control box "D" terminal and earth.

With "AC" charging systems a whining sound that varies with speed and load can be heard.

On 10/11 AC Alternators, fit a 1 microfarad capacitor between the main output terminal and earth.

On 15/16/17 AC/ACR Alternators, fit a 3 microfarad capacitor between the positive terminal and earth.

There are different types of socket terminal with these alternators, however, the terminal markings are printed onto the back casing.

NOTE: Ensure that the control box earth point is close to the control box.

